# Exhibit C

## Blast SEQ ID NO:1 versus human genomic

MEGABLAST 1.2.3-Paracel [2001-11-20]

**Reference**:
Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),
"A greedy algorithm for aligning DNA sequences",
J Comput Biol 2000; 7(1-2):203-14.
Database: Homo_sapiens.latestgp.masked.fa
           44,521 sequences; 200,768,834,160 total letters

Query= LEX161seqid1
          (2115 letters)

|                                                    | Score (bits) | E Value |
|----------------------------------------------------|--------------|---------|
| Sequences producing significant alignments:        |              |         |
| AC016643.6.1.179969                                | 734          | 0.0     |
| AC008958.7.1.109526                                | 520          | e-144   |

>AC016643.6.1.179969
          Length = 179969

 Score =  734 bits (370), Expect = 0.0
 Identities = 370/370 (100%)
 Strand = Plus / Plus


Query: 957   agatgatttaagccagaagttaaaacccttgggtgaagcagaacgagagtttattttgaa
1016
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60550 agatgatttaagccagaagttaaaacccttgggtgaagcagaacgagagtttattttgaa
60609


Query: 1017  tttgaagaaaaaggaatgcaaagacaggggttttgaatatgatgggaaaatcaatgcctg
1076
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60610 tttgaagaaaaaggaatgcaaagacaggggttttgaatatgatgggaaaatcaatgcctg
60669


Query: 1077  ggatctatattactacatgactcagacagaggaactcaagtattccatagaccaagagtt
1136
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60670 ggatctatattactacatgactcagacagaggaactcaagtattccatagaccaagagtt
60729


Query: 1137  cctcaaggaatacttcccaattgaggtggtcactgaaggcttgctgaacacctaccagga
1196
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60730 cctcaaggaatacttcccaattgaggtggtcactgaaggcttgctgaacacctaccagga
60789

```
Query: 1197   gttgttgggactttcatttgaacaaatgacagatgctcatgtttggaacaagagtgttac
1256
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60790  gttgttgggactttcatttgaacaaatgacagatgctcatgtttggaacaagagtgttac
60849


Query: 1257   actttatactgtgaaggataaagctacaggagaagtattgggacagttctatttggacct
1316
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 60850  actttatactgtgaaggataaagctacaggagaagtattgggacagttctatttggacct
60909


Query: 1317   ctatccaagg 1326
              ||||||||||
Sbjct: 60910  ctatccaagg 60919



  Score =  520 bits (262), Expect = e-144
  Identities = 262/262 (100%)
  Strand = Plus / Plus


Query: 40     agagttggtggttccaggatttttactcagaatgacgttaggaagagaagtgatgtctcct
99
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 30994  agagttggtggttccaggatttttactcagaatgacgttaggaagagaagtgatgtctcct
31053


Query: 100    cttcaggcaatgtcttcctatactgtggctggcagaaatgttttaagatgggatctttca
159
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 31054  cttcaggcaatgtcttcctatactgtggctggcagaaatgttttaagatgggatctttca
31113


Query: 160    ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat
219
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 31114  ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat
31173


Query: 220    gctgttggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca
279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 31174  gctgttggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca
31233


Query: 280    gatgtagaagtaaagtatatag 301
              ||||||||||||||||||||||
Sbjct: 31234  gatgtagaagtaaagtatatag 31255



  Score =  405 bits (204), Expect = e-110
```

Identities = 204/204 (100%)
Strand = Plus / Plus


Query: 1324    agggaaggaaaatacaatcatgcggcctgcttcggtctccagcctggctgccttctgcct 1383
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 64886   agggaaggaaaatacaatcatgcggcctgcttcggtctccagcctggctgccttctgcct 64945


Query: 1384    gatggaagccggatgatggcagtggctgccctcgtggtgaacttctcacagccagtggca 1443
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 64946   gatggaagccggatgatggcagtggctgccctcgtggtgaacttctcacagccagtggca 65005


Query: 1444    ggtcgtccctctctcctgagacacgacgaggtgaggacttactttcatgagtttggtcac 1503
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 65006   ggtcgtccctctctcctgagacacgacgaggtgaggacttactttcatgagtttggtcac 65065


Query: 1504    gtgatgcatcagatttgtgcacag 1527
               ||||||||||||||||||||||||
Sbjct: 65066   gtgatgcatcagatttgtgcacag 65089


 Score =  379 bits (191), Expect = e-102
 Identities = 191/191 (100%)
 Strand = Plus / Plus


Query: 1526    agactgattttgcacgatttagcggaacaaatgtggaaactgactttgtagaggtgccat 1585
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 81947   agactgattttgcacgatttagcggaacaaatgtggaaactgactttgtagaggtgccat 82006


Query: 1586    cgcaaatgcttgaaaattgggtgtgggacgtcgattccctccgaagattgtcaaaacatt 1645
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82007   cgcaaatgcttgaaaattgggtgtgggacgtcgattccctccgaagattgtcaaaacatt 82066


Query: 1646    ataaagatggaagccctattgcagacgatctgcttgaaaaacttgttgcttctaggctgg 1705
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82067   ataaagatggaagccctattgcagacgatctgcttgaaaaacttgttgcttctaggctgg 82126


Query: 1706    tcaacacaggt 1716
               |||||||||||
Sbjct: 82127   tcaacacaggt 82137

Score =  323 bits (163), Expect = 2e-85
Identities = 163/163 (100%)
Strand = Plus / Plus


Query: 661    ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 53694  ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa 53753


Query: 721    attaccttaaaatatccacactatttccctgtcatgaagaaatgttgtatccctgaaacc 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 53754  attaccttaaaatatccacactatttccctgtcatgaagaaatgttgtatccctgaaacc 53813


Query: 781    agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 823
              |||||||||||||||||||||||||||||||||||||||||||
Sbjct: 53814  agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 53856



Score =  301 bits (152), Expect = 8e-79
Identities = 152/152 (100%)
Strand = Plus / Plus


Query: 300    agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc 359
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 35386  agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc 35445


Query: 360    agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg 419
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 35446  agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg 35505


Query: 420    agatatatttgagagaattgttcatttacagg 451
              ||||||||||||||||||||||||||||||||
Sbjct: 35506  agatatatttgagagaattgttcatttacagg 35537



Score =  280 bits (141), Expect = 3e-72
Identities = 141/141 (100%)
Strand = Plus / Plus


Query: 1842   aggcacaaatatgccagctacctttggacatttggcagggggatacgatggccaatatta 1901
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

```
Sbjct: 84687 aggcacaaatatgccagctacctttggacatttggcaggggggatacgatggccaatatta
84746


Query: 1902  tggatatctttggagtgaagtattttccatggatatgttttacagctgtttttaaaaaaga
1961
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 84747 tggatatctttggagtgaagtattttccatggatatgttttacagctgtttttaaaaaaga
84806


Query: 1962  agggataatgaatccagaggt 1982
              |||||||||||||||||||||
Sbjct: 84807 agggataatgaatccagaggt 84827



  Score =  270 bits (136), Expect = 3e-69
  Identities = 137/138 (99%)
  Strand = Plus / Plus


Query: 821   aggaaaacaccataattttgcagcagctactcccactgcgaaccaaggtggccaaactac
880
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 58207 aggaaaacaccataattttgcagcagctactcccactgcgaaccaaggtggccaaactac
58266


Query: 881   tcggttatagcacacatgctgacttcgtccttgaaatgaacactgcaaagagcacaagcc
940
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 58267 tcggttatagcacacatgctgacttcgtccttgaaatgaacactgcaaagagcacaagcc
58326


Query: 941   gcgtaacagcytttctag 958
              ||||||||||| |||||||
Sbjct: 58327 gcgtaacagcctttctag 58344



  Score =  268 bits (135), Expect = 1e-68
  Identities = 136/137 (99%)
  Strand = Plus / Plus


Query: 1979  aggttggaatgaaatacagaaacctaatcctgaaacctgggggatctctggacggcatgg
2038
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 95214 aggttggaatgaaatacagaaacctaatcctgaaacctgggggatctctggacggcatgg
95273


Query: 2039  acatgctccacaatttcttgaaacgtgagccaaaccaaaaagcgttcctaatgagtagag
2098
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 95274 acatgctccacaatttcttgaaacgtgagccaaaccaaaaagcgttcctaatgagtagag
95333
```

Query: 2099  gcctgcatgctycgtga 2115
            ||||||||||| |||||
Sbjct: 95334 gcctgcatgctccgtga 95350


 Score =  262 bits (132), Expect = 7e-67
 Identities = 132/132 (100%)
 Strand = Plus / Plus


Query: 1713   aggtcttctgaccctgcgccagattgttttgagcaaagttgatcagtctcttcataccaa
1772
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82469 aggtcttctgaccctgcgccagattgttttgagcaaagttgatcagtctcttcataccaa
82528


Query: 1773   cacatcgctggatgctgcaagtgaatatgccaaatactgctcagaaatattaggagttgc
1832
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82529 cacatcgctggatgctgcaagtgaatatgccaaatactgctcagaaatattaggagttgc
82588


Query: 1833   agctactccagg 1844
             ||||||||||||
Sbjct: 82589 agctactccagg 82600


 Score =  222 bits (112), Expect = 6e-55
 Identities = 116/117 (99%), Gaps = 1/117 (0%)
 Strand = Plus / Plus


Query: 443    atttacaggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa
502
             ||||  |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 49854 attt-caggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa
49912


Query: 503    agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg 559
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 49913 agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg
49969


 Score =  208 bits (105), Expect = 1e-50
 Identities = 105/105 (100%)
 Strand = Plus / Plus


Query: 559    gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc
618
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 52613 gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc
52672

```
Query: 619    aatgaggatgataccttccttgtattttccaaggctgaacttggt 663
               |||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 52673  aatgaggatgataccttccttgtattttccaaggctgaacttggt 52717


>AC008958.7.1.109526
          Length = 109526

 Score =  520 bits (262), Expect = e-144
 Identities = 262/262 (100%)
 Strand = Plus / Minus


Query: 40     agagttggtggttccaggatttttactcagaatgacgttaggaagagaagtgatgtctcct
99
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 24199  agagttggtggttccaggatttttactcagaatgacgttaggaagagaagtgatgtctcct
24140


Query: 100    cttcaggcaatgtcttcctatactgtggctggcagaaatgttttaagatgggatctttca
159
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 24139  cttcaggcaatgtcttcctatactgtggctggcagaaatgttttaagatgggatctttca
24080


Query: 160    ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat
219
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 24079  ccagagcaaattaaaacaagaactgaggagctcattgtgcagaccaaacaggtgtacgat
24020


Query: 220    gctgttggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca
279
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 24019  gctgttggaatgctcggtattgaggaagtaacttacgagaactgtctgcaggcactggca
23960


Query: 280    gatgtagaagtaaagtatatag 301
               ||||||||||||||||||||||
Sbjct: 23959  gatgtagaagtaaagtatatag 23938



 Score =  323 bits (163), Expect = 2e-85
 Identities = 163/163 (100%)
 Strand = Plus / Minus


Query: 661    ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa
720
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1504   ggtgctcttcctgatgatttcattgacagtttagaaaagacagatgatgacaagtataaa
1445
```

Query: 721   attaccttaaaatatccacactatttccctgtcatgaagaaatgttgtatccctgaaacc
780

            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Sbjct: 1444  attaccttaaaatatccacactatttccctgtcatgaagaaatgttgtatccctgaaacc
1385


Query: 781   agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 823

            |||||||||||||||||||||||||||||||||||||||||||

Sbjct: 1384  agaagaaggatggaaatggcttttaatacaaggtgcaaagagg 1342



 Score =  301 bits (152), Expect = 8e-79
 Identities = 152/152 (100%)
 Strand = Plus / Minus


Query: 300   agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc
359

            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Sbjct: 19806 agtggaaaggaccatgctagactttccccagcatgtatcctctgacaaagaagtacgagc
19747


Query: 360   agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg
419

            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Sbjct: 19746 agcaagtacagaagcagacaaaagactttctcgttttgatattgagatgagcatgagagg
19687


Query: 420   agatatatttgagagaattgttcatttacagg 451

            ||||||||||||||||||||||||||||||||

Sbjct: 19686 agatatatttgagagaattgttcatttacagg 19655



 Score =  222 bits (112), Expect = 6e-55
 Identities = 116/117 (99%), Gaps = 1/117 (0%)
 Strand = Plus / Minus


Query: 443   atttacaggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa
502

            |||| |||||||||||||||||||||||||||||||||||||||||||||||||||||||

Sbjct: 5344  attt-caggaaacctgtgatctggggaagataaaacctgaggccagacgatacttggaaa
5286


Query: 503   agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg 559

            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Sbjct: 5285  agtcaattaaaatggggaaaagaaatgggctccatcttcctgaacaagtacagaatg 5229



 Score =  208 bits (105), Expect = 1e-50
 Identities = 105/105 (100%)
 Strand = Plus / Minus

```
Query: 559   gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc
618
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 2585  gaaatcaaatcaatgaagaaaagaatgagtgagctatgtattgattttaacaaaaacctc
2526


Query: 619   aatgaggatgataccttccttgtattttccaaggctgaacttggt 663
             |||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 2525  aatgaggatgataccttccttgtattttccaaggctgaacttggt 2481



 Score = 81.8 bits (41), Expect = 2e-12
 Identities = 41/41 (100%)
 Strand = Plus / Minus


Query: 1       atgatcgcccggtgccttttggctgtgcgaagcctccgcag 41
              |||||||||||||||||||||||||||||||||||||||||
Sbjct: 60390  atgatcgcccggtgccttttggctgtgcgaagcctccgcag 60350
```